

**Amendments to the Specification:**

Please amend the specification as indicated below, wherein deleted language is noted by double brackets and/or strikethrough font and additional language is underlined:

Replace the paragraph on page 11, line 26 through page 12, line 13 with the following paragraph:

A disc rotation apparatus using the hydrodynamic bearing in accordance with the present invention records or reproduces signals, wherein a recording/reproduction disc is concentrically secured to the hub rotor of the hydrodynamic bearing in accordance with claims 1 to 5 and rotated, magnetic heads or optical heads are provided so as to be opposed to the faces of the above-mentioned rotating disc, and the magnetic heads or optical heads are configured so as to be movable in parallel with the faces of the above-mentioned disc. By using the hydrodynamic bearing in accordance with the present invention, it is possible to obtain a disc rotation apparatus being high in the reliability like that of the bearing.

Replace the paragraph on page 15, line 18 through page 16, line 26 with the following paragraph:

A preferred embodiment of a hydrodynamic bearing in accordance with the present invention will be described below referring to FIGS. 1 to 10. FIG. 1 is a cross-sectional view of a hydrodynamic bearing in accordance with an embodiment of the present invention. In FIG. 1, a sleeve 1 has a bearing hole 20 at its nearly central portion, and herringbone-shaped dynamic pressure generation grooves 1A and 1B are formed on the inner circumferential face of the bearing hole 20. A recess portion 1C is formed at the lower end of the sleeve 1. A shaft 2 is rotatably inserted into the bearing hole 20. A flange 3 is secured to the lower end of the shaft 2 so as to be accommodated in the recess portion 1C at the lower end of the sleeve 1. A thrust plate 4 is secured to the recess portion 1C of the sleeve 1 by a securing method, such as laser welding, precision crimping or

bonding, and the recess portion 1C including the flange 3 is hermetically sealed. The sleeve 1 is secured to a base 6. The shaft 2 is secured to a hub rotor 7. Dynamic pressure generation grooves are provided on one of the opposed faces of the flange 3 and the thrust plate 4. In FIG. 1, dynamic pressure generation grooves 3A are provided on the lower face of the flange 3. Dynamic pressure generation grooves 3B are also provided on the upper face of the flange 3 opposed to the recess portion 1C of the sleeve 1. The insides of the dynamic pressure generation grooves 1A, 2A, 3A and 3B are filled with oil or grease. A rotor magnet 9 is installed in the hub rotor 7. In addition, a stator 8 is installed on the base 6 so as to be opposed to the above-mentioned rotor magnet 9. Two discs 10, for example, are installed on the hub rotor 7 via a spacer 12. The discs 10 are secured by a clamper 11 installed on the shaft 2 by a screw 13.

Replace the paragraph on page 19, line 13 through page 20, line 8 with the following paragraph:

The vertical axis of the graph in FIG. 4 represents an oil pressure (pascal) in the dynamic pressure generation groove 3A, which is variable depending on the value of the above-mentioned Y. The horizontal axis represents the value of equation  $(ds_y - dl_m)/(ds_y - dl_i)$ . If asymmetry is insufficient in the pressures inside the bearing, a partially negative pressure portion is generated somewhere inside the bearing, and air may be accumulated there. On the other hand, if asymmetry is excessive, the internal pressure becomes too high, and there arises a danger of causing cavitation or microbubbles. Relating to the hydrodynamic bearing in accordance with this embodiment, a hydrodynamic bearing is made by using transparent materials for the sake of observation, and experiments are carried out. As a result, it was found that when the value of the above-mentioned Y was in the range of 0.05 to 1.0, the amount of air bubbles entered and the amount of air accumulated during rotation were minimal, whereby this range was an appropriate range and air ~~was most hardly~~ is least likely to be accumulated in oil.